Amendments to the Specification

Please add the following new paragraph before the paragraph beginning on page 2, line 14:

BRIEF DESCRIPTION OF THE DRAWING

Fig. 1 is a flow chart of a method disclosed in this Application.

Please add the following new paragraph on page 3, just before the paragraph beginning on line 19:

Fig. 1 shows a method according to this invention. In step S1, cerebral-current signals of a vehicle occupant are detected. In step S2, the intention of a vehicle occupant is determined based on the intention of the vehicle occupant. In step S3, measures are initiated for transferring a current state of the vehicle into a state of the vehicle matched to the intention of the vehicle occupant.

Please add the following new paragraph on page 2, immediately after line 13:

Applicants disclose a method for initiating occupant-assisted measures inside a vehicle, particularly a motor vehicle, wherein cerebral-current signals of at least one vehicle occupant, particularly of the driver, are detected by a measurement technique, on the basis of the cerebral-current signals, the intention of the vehicle occupant is estimated or detected by real-time processing, and on the basis of the intention of the vehicle occupant, measures for transferring the current state of the vehicle into a state of the vehicle matched to the intention of the vehicle occupant are initiated in advance, wherein (1) the physiological signals are detected non-invasively;

(2) the cerebral-current signals are cerebral signals such as e.g. EEG, MEG, NIRS, fMRI and/or EMG; (3) the real-time processing of the measurement signals is performed by use of methods of signal processing and/or machine learning which allow an evaluation of the measurement signals as individual signals and without extensive training of the occupant of the vehicle; (4) the methods for signal processing for adaptive feature extraction from the measurement signals comprise, alternatively or in any desired combination, at least one of the following features: a) filtration (spatial and in the frequency range) and downsampling, b) splitting and projection, respectively, c) determination of spatial, temporal or spatio-temporal complexity dimensions, d) determination of coherence dimensions (related to phase or band energy) between input signals; (5) the filtration comprises, alternatively or in any desired combination, at least one of the following features: a) wavelet or Fourier filter (short-time), b) FIR or IIR filter, c) Laplace and common average reference filter, d) smoothing method; (6) the splitting and projection, respectively, comprises, alternatively or in any desired combination, at least one of the following features: a) independent component analysis and main component analysis, b) projection pursuit technique, c) sparse decomposition techniques, d) common spatial patterns techniques, e) common substance decomposition techniques, f) (Bayes') sub-space regularization techniques;(8) the machine learning method comprises a classification and/or regression, notably by use of a) core-based linear and non-linear learning machines (e.g. support vector machines, Kern Fisher, linear programming machines), b) discriminance analyses, c) neuronal networks, d) decision trees, e) generally, all linear and non-linear classification methods for the features obtained by signal processing; (7) the initiating measures are accident-preventive measures such as e.g. a) automatic safety belt

tightening, b) seat optimization, c) optimization of the vehicle reagibility to prepare a braking/steering operation, d) stability computations, e) pre-optimization of the vehicle dynamics in case of time-critical decisions, f) all predicative safety measures; (8) the intention or estimated on the basis of the cerebral-current signals serves for the verification of device-detected hazard situations, particularly by detection of a congruent motor intention build-up and situation modeling and validating; (8) use and integration continuous vigilance monitoring are employed; and (10) the measures to be initiated are taken on the basis of an averaging of the intentions of a plurality of vehicle occupants.